UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/689,114	03/21/2007	Trevor James Snyder	20060108USNP/106681.1700	1297
75313 7590 04/26/2017 XEROX CORPORATION C/O FOX ROTHSCHILD LLP Princeton Pike Corporate Center 997 Lenox Drive, Building 3 Princeton, NJ 08648-2311			EXAMINER	
			BECKLEY, JONATHAN R	
			ART UNIT	PAPER NUMBER
			2672	
			NOTIFICATION DATE	DELIVERY MODE
			04/26/2017	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TREVOR JAMES SNYDER

Appeal 2016-008351 Application 11/689,114 Technology Center 2600

Before ST. JOHN COURTENAY III, JAMES R. HUGHES, and SCOTT E. BAIN, *Administrative Patent Judges*.

COURTENAY, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–4, 6, 9, 20–23, 25–27, 29, and 31–33, which are all the claims pending in this application. Claims 5, 7, 8, 10–19, 24, 28, 30, and 34 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Invention

The disclosed and claimed invention on appeal is directed to:

A method of monitoring at least one printing device via a communication network is disclosed. An error identifier and a usability identifier are received from the printing device. The printing device is commanded to display a fault code. A service occurs as a response to the error identifier and the usability identifier. The level of service is dependent on the error identifier and the usability identifier.

(Abstract.)

Representative Claim 1

1. A method comprising:

monitoring, by a monitoring server, a printing device ² via a communication network;

determining, by one of either the monitoring server or the printing device, a usability identifier for the printing device;

receiving, by the monitoring server from the printing device, an error identifier:

[L4] displaying, by the printing device, a fault code comprising the usability identifier and the error identifier;

[L1] determining, by the printing device, whether the usability identifier exceeds a threshold value;

¹ Contested limitations L1, L2, L3, and L4 are emphasized in italics and bracketed with numbers **in the order argued** in the principal Brief.

² See Spec. ¶ 13: "Printing devices may include, but are not limited to, printers, copiers, faxes, scanners or other devices using ink or toner." (emphasis added).

[L2] in response to the usability identifier exceeding the threshold value, selecting a remote service center from a plurality of remote service centers based upon the fault code;

displaying, on a display of the printing device, contact information for the selected remote service center;

[L3] determining whether an input device that is integrated in the printing device is enabled for the fault code;

in response to determining that the input device is enabled for the fault code, automatically sending, via an external communication network to which the printing device is operably connected, the fault code from the input device to the selected remote service center.

Anticipation Rejection over Landau³

Claims 1–4, 6, 9, 20–23, 25–27, 29, and 31–33 are rejected under pre-AIA 35 U.S.C. § 102(b) as being anticipated by Landau et al. (US Patent 7,355,730 B2; Apr. 8, 2008) (hereinafter "Landau").

Grouping of Claims

Based upon Appellant's arguments, we decide the appeal of all rejected claims, except for independent claim 23, on the basis of representative claim 1. We address claim 23 separately, *infra*. To the extent Appellant has not advanced separate, substantive arguments for particular rejected claims or other issues, such arguments are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

³ We note the Examiner withdrew previous rejections under § 101 (Final Act. 2), and under § 103(a) (Ans. 20–21).

ANALYSIS

We have considered all of Appellant's arguments and any evidence presented. We find Appellant's arguments unpersuasive for the reasons discussed infra. We adopt as our own: (1) the findings and legal conclusions set forth by the Examiner in the action from which this appeal is taken, and (2) the findings, legal conclusions, and explanations set forth in the Answer in response to Appellant's arguments. (Ans. 21–29.) We highlight and address specific findings and arguments for emphasis in our analysis below.

Anticipation Rejection of Representative Claim 1 over Landau

Issues

Under pre-AIA 35 U.S.C. § 102(b), did the Examiner err by finding Landau expressly or inherently discloses contested limitations L1, L2, L3, and L4, within the meaning of representative claim 1? ⁴

Contested Limitation L1 of Representative Claim 1

Appellant contends "<u>Landau</u> does not disclose 'determining . . . whether the usability identifier exceeds a threshold value." (App. Br. 9.)

Regarding the contested limitation L1, Appellant refers to the support in the

⁴ We give the contested claim limitations the broadest reasonable interpretation consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *cf.* Spec. ¶ 39 ("It will be appreciated that various of the above-disclosed and other features and functions, or alternatives thereof, may be desirably combined into many other different systems or applications. Also that various presently unforeseen or unanticipated alternatives, modifications, variations or improvements therein may be subsequently made by those skilled in the art which are also intended to be encompassed by the following claims.").)

Specification, reproduces Landau (15:43–46), and contends: "Landau is silent on what [the] service requirement is and makes no mention[] of [a] **usability identifier**. Nor does Landau mention any type of **threshold value** and determining whether **a usability identifier exceeds a threshold value**." (App. Br. 10 (emphasis added).)

At the outset, we note a literal mention in Landau of a "usability identifier" or "a threshold value" (or "fault code" or "error identifier" — claim 1) is not required, because anticipation "is not an 'ipsissimis verbis' test." *In re Bond*, 910 F.2d 831, 832–33 (Fed. Cir. 1990) (citing *Akzo N.V. v. U.S. Int'l Trade Comm'n*, 808 F.2d 1471, 1479 n.11 (Fed. Cir. 1986)). "An anticipatory reference . . . need not duplicate word for word what is in the claims." *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1369 (Fed. Cir. 1991).

Claim Construction

We further note method claim 1 recites conditional language:

- [L1] determining, by the printing device, whether the usability identifier exceeds a threshold value;
- [L2] in response to the usability identifier exceeding the threshold value, selecting a remote service center from a plurality of remote service centers based upon the fault code;
- [L3] determining whether an input device that is integrated in the printing device is enabled for the fault code;

in response to determining that the input device is enabled for the fault code, automatically sending, via an external communication network to which the printing device is operably connected, the fault code from the input device to the selected remote service center.

(Emphasis added.)

Thus, method claim 1 recites the contested steps or acts of "selecting a remote service center" and "automatically sending . . . the fault code" that are **conditionally performed** "in response to" the respective condition precedents being satisfied. (Emphasis added.)

However, we conclude these conditional steps or acts are not required to be performed within the scope of claim 1, in the event the usability identifier does not exceed the threshold value, or if it is determined that the input device is not enabled for the fault code.

We note that conditional steps employed in a method claim need not be found in the prior art if, under the broadest reasonable interpretation, the method need not invoke those steps. *See Ex parte Schulhauser*, No. 2013-007847, 2016 WL 6277792, at *4 (PTAB April 28, 2016) (precedential) (holding "[t]he Examiner did not need to present evidence of the obviousness of the remaining method steps of claim 1 that are not required to be performed under a broadest reasonable interpretation of the claim . . ."; *see also Ex parte Katz*, No. 2010-006083, 2011 WL 514314, at *4–5 (BPAI Jan. 27, 2011).⁵

⁻

⁵ See also Applera Corp. v. Illumina, Inc., 375 F. App'x 12, 21 (Fed. Cir. 2010) (unpublished) (affirming a district court's interpretation of a method claim as including a step that need not be practiced if the condition for practicing the step is not met); Cybersettle, Inc. v. Nat'l Arbitration Forum, Inc., 243 F. App'x 603, 607 (Fed. Cir. 2007) (unpublished) ("It is of course true that method steps may be contingent. If the condition for performing a contingent step is not satisfied, the performance recited by the step need not be carried out in order for the claimed method to be performed.").

Applying this reasoning here, we conclude the broadest reasonable interpretation of method claim 1 includes situations that fail to satisfy the recited condition precedents. In these situations, we conclude the contested language following the condition precedent is not required to be performed. *See Schulhauser*, No. 2013-007847, at *4–5 (precedential).

Therefore, we find unavailing Appellant's arguments that Landau does not disclose the conditional steps or acts of claim 1, because such arguments are not commensurate with the broadest reasonable interpretation of method claim 1. (*Id.*)

Even assuming, *arguendo*, that our reviewing court were to conclude that the contested conditional limitations are required to be performed within the scope of method claim 1, we are not persuaded by Appellant's arguments in the Briefs, for the following reasons.

Regarding contested limitation L1, we agree with the Examiner's broad but reasonable claim construction of the recited "usability identifier" which may exceed a threshold value. (Ans. 21–22.) The Examiner concludes the scope of the recited "usability identifier" (claim 1) covers "any data or information indicating the use of a printing device." (Ans. 21 (emphasis added).) The Examiner further concludes the scope of the recited exceeding "a threshold" (claim 1) covers "a value that is within a range which has exceeded any distinguishable amount" (Id. (emphasis added).)

Turning to Appellant's Specification for *context*, we find Appellant has not set forth a definition for the contested claim terms which consist entirely of **data**: "a **fault code** comprising the **usability identifier** and the **error identifier**," as recited in claim 1. (Emphasis added.) We find

Appellant's Specification (e.g., ¶ 5 (emphasis added)) merely describes exemplary, non-limiting embodiments for the contested **data** elements:

The usability identifier may represent usage of the printing device or multiple devices in the communication network over a period of time. The commanding may include, for example, displaying the fault code in a display area of the printing device and/or printing the fault code. The fault code may be dependent upon the usability identifier and the error identifier. In an embodiment, the error identifier represents a maintenance issue in the printing device.

See also Spec. (\P 20):

The fault code may be a combination of both the error identifier and the usability identifier. The error identifier and usability identifier may each be displayed as part of the fault code as part as a symbol, number, letter, image, bar graph or a pie chart. The usability identifier may be a percentage displayed by an image, graph, chart or a number between 0 and 100. Alternatively, the fault code may be an alphanumeric code that is based on both the error identifier and the usability identifier.

(Emphasis added.)

We find no supporting limiting definition or disclaimer in the originally-filed Specification ⁶ that would preclude the Examiner's broader reading, nor has Appellant argued specific *supported definitions* for the respective data claim terms. (Ans. 21; *see* n.3, *supra*.)

In reviewing the record, we understand the Examiner's mapping to broadly but reasonably read the "fault code" recited in claim 1 on Landau's

⁶ See also Spec. ¶ 17: "The usability identifier may be an indicator of the usage of a printing device 100." Given this *context*, we find Landau's counters of paper or toner usage (e.g., col. 3, ll. 6–16), are "usability identifiers" under a broad but reasonable interpretation of claim 1.

⁷ See Spec. ¶ 12: "The fault code may comprise an error identifier, a

internal data, which includes a number of diagnostic counters (each a "usability identifier" within the meaning of claim 1) which provide data to trigger error messages that are used to indicate *specific errors*: e.g., paper or toner is low, or empty. *See* Landau, col. 3, 11. 1–16:

at least some of the following internal data may be read out over the computer network serial number of the device and/or at least one internal component of the device, counter reading of a total counter assigned to all paper sources and/or duplicating units of the device, at least one counter reading of a servicing counter and/or accounts counter and/or at least one other counter, optionally at least one counter reading assigned to an individual paper source of the device and/or at least one counter reading assigned to an individual duplicating unit of the device, error messages and/or other status data (for example "paper low" (or "cassette empty") and "toner low" information).

(Emphasis added.)

Thus, we find a preponderance of the evidence cited by the Examiner (e.g., Landau, col. 2, l. 63–col. 3, l. 24) supports the Examiner's findings (Ans. 22) that the contested "usability identifier" is disclosed "at least from [Landau's] **internal data** [("fault codes"—claim 1)] comprising one of the stated **counters**." (i.e., "usability identifier"—claim 1). (*See* Landau, col 3, l. 67–col. 4, l. 4, in which such **internal data** (i.e., "fault codes") include "current information" such as "**information about counter readings**, toner

usability identifier, or a combination of both." See Genentech, Inc. v. Chiron Corp, 112 F.3d 495, 501 (Fed. Cir. 1997) ("Comprising' is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim."). See Claim 1: "displaying . . . a fault code comprising the usability identifier and the error identifier;"

and paper supplies, machine availability together with **error messages** and **error history relating to the assigned office machines**" and a paper source **counter** (emphasis added).)

Consistent with our discussion above, we find Landau's **counter** data ("**usability identifier**" — claim 1 (emphasis added)) is used to generate an error message ("**error identifier**" — claim 1 (emphasis added)) when a given counter exceeds a **threshold**, such as "paper low' (or 'cassette empty') and 'toner low' information)," whereby such indicators communicate to the customer service technician that the office printer or copier will soon become unusable due to lack of paper or toner. (Col. 3, 11. 14–16.)

We note Landau's invention "relates to an office machine which comprises an electronic control unit and a data communication interface, wherein **internal data** of the office machine may be **read out** and/or **internal data** of the office machine are settable via the data communication interface." (Col. 1, Il. 11–16 (emphasis added).) Although a technician may carry "out the repair/servicing, possibly on the basis of the data which have been read out from the device 10" (col. 18, Il. 50–52), "[d]ata transmission or retrieval may be made **fully automatic**. The information computer system 226c [(Fig. 2)] may furthermore transmit information of relevance to the servicing of the assigned office machines by data communication to the **assigned servicing computer systems** . . . [(i.e., plural systems — see Fig. 4)]." (Col. 17, Il. 20–25 (emphasis added).)

Given this evidence (id.), and given the absence of any definition for the contested data elements ("a fault code comprising the usability identifier and the error identifier" and "a threshold value"—claim 1 (emphasis added)), on this record, we are not persuaded the Examiner's reading of these contested limitations of claim 1 on the corresponding cited portions of Landau is overly broad, unreasonable, or inconsistent with Appellant's Specification.⁸ Therefore, we find unpersuasive Appellant's contentions regarding contested limitation L1 of claim 1.

Contested Limitation L2 of Representative Claim 1

Regarding contested limitation L2, Appellant contends "<u>Landau does</u> not teach 'selecting a remote service center from a plurality of remote service centers based upon the fault code," as recited in claim 1. (App. Br. 10.) Appellant further contends, "[n]or does *Landau* teach making a selection <u>based on the fault code</u>, as required by Appellant's claim 1." (*Id.* at 11.)

We disagree, because Landau's Figure 4 expressly depicts a **plurality of servicing computer systems** (226b, 226b', 226b'' and 226c), of the type depicted as 226b in Figure 2, that are selected. Such selection is made "as a function of the internal data" that has been read, as described in Landau (col. 6, 11. 31–44 (emphasis added)):

the notification functionality is designed, as a function of the internal data which have been read out, to select between two or more assigned communication devices and/or two or more assigned further computer units to which the data and/or messages relating to preventive and/or acute servicing operations on at least one of the office machines are to be provided or sent. This proposed development relates

⁸ Because "applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee." *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (internal citation omitted).

to the possibility already described that, as a function of machine status, a selection is made between various routes of communication and thus between the recipients of the notification or data, in order consequently to provide a response which is appropriate to the circumstances.

Given this evidence (Landau, Figs. 2, 4, col. 6, ll. 31–44), we find unpersuasive Appellant's contentions regarding contested limitation L2 of claim 1.

Contested Limitation L3 of Representative Claim 1

Appellant contends "<u>Landau</u> does not teach 'determining whether an input device that is integrated in the print device is enabled for the fault code' and if so, 'automatically sending . . . the fault code . . . to the selected remote service center," as recited in claim 1. (App. Br. 11.)

We agree with and adopt the Examiner's findings, as articulated in the Answer (26), pointing to the cited portions of Landau in columns 15–18, and Figures 5 and 6. Regarding the broadest reasonable interpretation of the claimed "input device" recited in the condition precedent step L3 we find a broad supporting description in the Specification (¶ 26):

The input device 160, as depicted in FIG. 1, is a structural element of the printing device 100 that allows a customer to enter a command into the device. The input device 160 may include, but is not limited to, a button, lever, keyboard, or touch screen. . . . The input device 160 may be used by a customer of the printing device 100 to contact the service center 170. In one embodiment, the printing device 100 may connect through a communication device to the service center 170. In one embodiment, the customer may then enter information into the printing device 100 to relay to the service center 170. In another embodiment, the printing device 100 may automatically send the fault code, error identifier, and/or usability identifier, to the service center 170 after the input device 160 is used by a

customer. The printing device 100 may also send the service center 170 other pertinent information such as, but not limited to, the location of the printing device 100 and a person to contact regarding the printing device 100.

Given this description (*id.*), we find Landau (col. 12, ll. 30–38) describes an "input device" integrated into an office machine (e.g., printer), within the meaning of claim 1:

By means of the computer unit (computer unit 20 in the case of copier 10) integrated into the office machine or connected thereto, it is preferably possible for the assigned servicing computer system 26 to retrieve from a particular office machine not only data of relevance to servicing (in particular counter readings, error states etc.) but also data of relevance to users (such as paper supply exhausted, toner supply exhausted, paper supply below a threshold value, toner supply below a threshold value etc.).

Landau further describes (col. 12, ll. 11–15): "It may be provided that reading out or setting of internal data may alternatively also proceed 'locally' on the office machine itself or via the LAN or an Ethernet, for instance by a service technician by means of a portable computer 102 or the like."

We note method claim 1 does not specify who or what performs the L3 step of "determining whether an input device that is integrated in the printing device is enabled for the fault code; . . ." (emphasis added).

The Examiner's finding of anticipation regarding the subsequent conditional limitation of "automatically sending . . . the fault code from the input device to the selected remote service center" is further buttressed by Landau's description (col. 14, ll. 47–55):

An external servicing computer system 226b is furthermore provided which, subject to permission by a firewall 230, can access the first-stated servicing computer system 226a over the Internet 24 and, either directly without involving the servicing computer system 226a, or indirectly, namely by the intermediary of said servicing computer system 226a, has read and/or write access by means of the particular office machine computer unit to the internal data of the connected office machines.

Therefore, on this record, and for the reasons discussed above, we find a preponderance of the evidence supports the Examiner's finding of anticipation regarding contested limitation L3 of claim 1.

Contested Limitation L4 of Representative Claim 1

Appellant contends, "<u>Landau</u> does not disclose 'displaying, by the printing device, a fault code comprising the usability identifier and the error identifier," as recited in claim 1. (App. Br. 12.)

We agree with the Examiner's findings (Ans. 27), noting that Landau (col. 18, ll. 50–53) expressly describes: "The technician then carries out the repair/servicing, possibly on the basis of the data which have been read out from the device 10." Moreover, as previously discussed regarding limitation L3, Landau describes (col. 12, ll. 11–15): "It may be provided that reading out or setting of **internal data** may alternatively **also proceed 'locally'** on the office machine itself or via the LAN or an Ethernet, for instance by a **service technician** by means of a portable computer 102 or the like." Our claim construction regarding the contested data elements is explained above.

Given our aforementioned mapping of the recited "fault code" (claim 1) to Landau's *internal data* that further comprises a "usability identifier"

(corresponding to Landau's counters) and "an error identifier" (corresponding to Landau's error messages), the Examiner's findings are buttressed by Landau's express description directed to: "import of internal device data . . . from a device (for example a copier or printer; internal data comprise, for example, counter readings and error messages); acceptance and display of detailed customer and machine/ device data;" (Landau, col. 19, 11. 55-60).

Therefore, on this record, and for the reasons discussed above, we find a preponderance of the evidence supports the Examiner's finding of anticipation regarding limitation L4 of claim 1.

For at least the aforementioned reasons, we are not persuaded of error regarding the Examiner's finding of anticipation over Landau for all contested limitations (L1, L2, L3, and L4), as recited in representative claim 1. We note the associated grouped claims (not separately argued) fall with claim 1. *See* Grouping of claims, *supra*.

Anticipation Rejection of Independent Claim 23 over Landau Regarding claim 23, Appellant contends (App. Br. 13): In particular, *Landau* fails to disclose, among other things, at least the following limitations of claim 20:

- select a remote service center from the plurality of remote service centers based upon the fault code;
- determine whether the input device is enabled for the fault code; and
- in response to determining that the input device is enabled for the fault code, automatically communicate, via the

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external communication network, the fault code from the input device to the selected remote service center.

Further regarding claim 23, Appellant contends:

As such, the usability identifier of claim 23 provides a user with information about the operation of the printing device over three distinct periods of time. *Landau* provides that "[c]urrent information about counter readings, toner and paper supplies, machine availability together with error messages and error history relating to the assigned office machines can permanently be available to the servicing computer unit." *Landau* at 3:67-4:4. But this generalized statement does not disclose or inherently teach the specific components of a usability identifier required by claim 23.

(*Id.* at 15.)

Turning to the support in the Specification (¶ 18) for *context* (as noted by the Examiner — Ans. 28), Appellant describes the temporal aspects of the contested limitations:

One part may be the current usage, such as usage over the past week or the usage over the past month. The second part may be the usage over a past period of time such as, but not limited to, the usage over the past two or three months. The third part may be the usage over a more extended period of time such as, but not limited to, usage over the past six months or usage the past year or even since the printers start of life, etc. In one embodiment, these parts may be displayed in any order. In one embodiment, there may be more or less than three parts that comprise the usability identifier.

(Spec. \P 18).

Given this context (*id.*), we broadly but reasonably interpret the contested limitations of claim 23 as requiring the determination of a particular "usability identifier" that includes the current print usage value over a first time period, and older print usage values corresponding to two

past time periods. Given our claim construction, and the portions of Landau cited by the Examiner, we are not persuaded of error regarding the Examiner's finding of anticipation (Ans. 28–29):

As stated above, Landau discloses counter readings and values which are made to date or within a period of time. Further, Landau discloses that the values can be over a lifetime, since the last servicing, since the history of a plurality of servicing, or since any change from a last query, (Column 11, lines 56-Column 12 lines 10).

As described by Landau (col. 11, 1. 60–col 12, 1. 3),

[t]he following data may be taken into consideration in connection with copiers or the like:

machine serial number, total counter, configuration data, error messages (optionally with detailed description), counter readings for assemblies (for instance heater unit or fuser/fixer unit) or components (e.g. drum, heated rollers, feed spindles etc.). In this manner it is possible, for example, to query the number of prints, copies, faxes or scans which have been made to date or within a period of time. Internal data of the office machines can moreover be set by data communication over the Internet.

Accordingly, we sustain the Examiner's anticipation rejection of independent claim 23 over Landau.

Reply Brief

To the extent Appellant advances new arguments in the Reply Brief not in response to a shift in the Examiner's position in the Answer, we note arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause. *See* 37 C.F.R. § 41.41(b)(2).

DECISION

We affirm the Examiner's decision rejecting claims 1–4, 6, 9, 20–23, 25–27, 29, and 31–33 under 35 U.S.C. \S 102(b).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED